Owner's Manual

Merkel
Side by Side
Shotguns

Side-by-Side Rifles & 96K Drillings

Suhler Jagd-und Sportwaffen

Read the Instructions in this Manual Carefully before using This Firearm!

Owner's Manual
MERKEL SIDE BY SIDE SHOTGUNS, DOUBLE RIFLES AND 96K DRILLINGS

This manual and the warnings contained herein must be read and understood before using your firearm. This manual familiarizes the user with the function and the handling of the firearm and warns of the potential dangers of misuse that may lead to accidents or injuries. This manual should always accompany this firearm and be transferred with it upon change of ownership, or when the firearm is loaned or presented to another person. THIS MANUAL IS NOT A SUBSTITUTE FOR A HUNTING SAFETY COURSE OR A FIREARMS SAFETY COURSE!

WARNING! TREAT EVERY FIREARM AS IF IT WERE LOADED AT ALL TIMES! REMEMBER, NO SAFETY IS FOOLPROOF! FIREARMS SAFETY IS THE RESPONSIBILITY OF THE PERSON WHO HANDLES FIREARMS AND AMMUNITION!

Dear Customer:

Your Merkel Side-by-Side Shotgun, Double Rifle or 96K Drilling is manufactured by Merkel to the highest standards. It has been produced to meet state-of-the-art requirements for today's hunter. You can expect unsurpassed performance, superb quality, optimum user comfort, and long service life.

As a result of our thorough quality assurance system, you can be certain that you have purchased a product of truly outstanding quality.

Please read this manual and the warnings contained herein carefully to familiarize yourself with the function and operation of this firearm.

IMPORTANT NOTE:

This manual is for use with Merkel Side-by-Side Shotguns, Double rifles and 96K Drillings. **If you are unsure of the exact model of your Merkel, please contact GSI, Inc. for identification**. Read this manual **thoroughly and completely familiarize** yourself with your Merkel firearm to get the maximum enjoyment and safety from your new firearm.

Technical specifications of this firearm may change without notice.

TABLE OF CONTENTS

Page No.

Essential precautions for the handling of firearms 5
Before shooting your new Merkel firearm 9
Bore obstructions WARNING 9
Illustration of major components. 11
Special Note 12
Side-by-Side Shotguns 12
Operation of the Shotgun Safety Mechanism.....12
Side-by-Side Shotgun Double & Single Triggers 14
Top Lever 14
Ejectors 15
Loading & Firing Side-by-Side Shotguns 15
Double Rifles 16
Operation of the Double Rifle Safety Mechanism 16
Double Rifle Trigger Operations 18
Top Lever 18
Ejectors 18
Loading & Firing Double Rifles 19
Drillings 20
Operation of the Drilling Safety Mechanism 20
Drilling Trigger Operations 21
Top Lever 22
Extractors 22
Loading & Firing Drillings 22
Firearm Assembly 24
Gauge, Caliber, Chamber length & Choke Designation ...25
Ammunition Warning 26
Choke Identification.....28
Dry Firing 28
Disassembly 28
Cleaning 29
Notes 31
Quick reference 34

ESSENTIAL PRECAUTIONS FOR THE HANDLING OF FIREARMS

THE WARNINGS AND ADVICE GIVEN IN THIS MANUAL ARE FOR YOUR PROTECTION AS WELL AS THE SAFETY OF OTHERS. DISREGARDING INFORMATION IN THIS MANUAL MAY RESULT IN SERIOUS INJURY OR DEATH.

Before you attempt to use or shoot your new Merkel Firearm, learn and understand the following basic rules. Your safety and the safety of others depends upon your safe and careful handling of your new Merkel firearm.

Any firearm must be considered a potentially dangerous object requiring particular caution in storage, handling and use.

Make sure to ALWAYS handle and treat every firearm as if it were loaded.

NEVER place your finger on the trigger unless you intend to fire a shot. ALWAYS load your Merkel firearm so as to avoid any danger for by-standers. Adequate firearm safety can only be ensured with the firearm in clean and mechanically sound condition.

Inexpert handling as well as improper or negligent care may impair function and safety of the firearm. Unauthorized alterations, modifications or adjustments to the firearm as well as damage to the firearm through carelessness will void any claims under the manufacturer's service agreement.

Any work on the firearm must be done by qualified and authorized gunsmiths, armorers, or factory authorized service facilities.

Firearms must ALWAYS be stored out of the reach of persons not familiar with firearms, particularly children. NEVER store ammunition with a firearm.

In order to avoid damage during transport, the firearm should ALWAYS be transported in the original packing carton or in a suitable

commercially available transport case.

ALWAYS keep the muzzle of your firearm pointed in a safe direction. NEVER point any firearm at anything you do not intend to shoot. Stay alert and be aware of all persons and property within shooting range.

NEVER give a loaded firearm to another person. ALWAYS open the action and inspect the chamber for ammunition, and unload any firearm before giving the firearm to another person for inspection. ALWAYS ensure that the safety is in the "Safe" position. ALWAYS unload firearms after use to prevent the occurrence of an accidental discharge.

KEEP the barrel, chamber and bore free of all obstructions. Firing a firearm with a barrel, chamber or bore obstruction can cause damage to the firearm and injury to the shooter or other persons nearby, and could result in death. Keep the barrel, chamber and bore free and clean of mud, snow, cleaning patches, or any other materials which may clog the barrel.

NEVER drink alcohol or take medications while handling a firearm. Responsible firearm handling requires a state of mental alertness.

ALWAYS seek a doctor's advice if you are taking a medication to be sure you are fit to shoot and handle a firearm safely.

DO NOT totally and blindly rely on the mechanical safety devices on any firearm. The mechanical safety's function is to block sear engagement to prevent accidental discharge of the firearm. However, should this device fail, it is possible to fire a firearm even when the safety is in the "Safe" position. NEVER place your finger on the trigger when you do not intend to shoot. NEVER place your finger on the trigger or test any safety device when the muzzle of a firearm is pointed in an unsafe direction.

NEVER transport a loaded firearm.

ALWAYS wear and encourage others to wear protective shooting glasses. Flying particles could damage eyes and cause blindness. Protective shooting glasses could prevent such injury.

ALWAYS wear and encourage others to wear ear protection when shooting, especially on a range. Without ear protection, the noise

of even one shot from a firearm, or other firearms close to you, could leave a ringing in your ears for some time after firing while the cumulative long term effect could be permanent hearing loss.

ALWAYS use only clean, dry, original high quality commercially manufactured ammunition in good condition loaded in accordance with factory standards. Do not use ammunition that has been exposed to prolonged periods of dampness or moisture. Gun and ammunition manufacturers design their products within exacting engineering safety limits. Handloads and remanufactured ammunition are sometimes outside those limits and can be so unsafe as to blow up or otherwise damage a firearm, and cause injury, death or damage to property. If there are any questions concerning the proper ammunition for your Merkel call or contact GSI, Inc., 108 Morrow Avenue, P.O. Box 129, Trussville, Alabama 35173, Tel. (205)-655-8299. Merkel and GSI, INC. specifically disclaim any responsibility for damage or injury whatsoever occurring in connection with, or as a result of, the use of faulty, or non-standard, or “remanufactured” or handloaded (reloaded) ammunition.

DO NOT put your finger on the trigger while unloading, loading, or any other time before you are ready to shoot. DO NOT dry fire on an empty chamber - the chamber may not be empty even if you think it is not loaded! TREAT EVERY FIREARM AS IF IT WERE LOADED!

KNOW your target and backdrop area. BE SURE it is safe to fire at your target. THINK! What will you HIT if you MISS your intended target? KNOW the potential range of your firearm and ammunition, and consider this danger for persons and property within that range. NEVER fire a firearm in the direction of people, non-game animals or property that could be injured or destroyed.

MAKE SURE your firearm is unloaded before crossing fences, climbing trees, jumping over ditches, or passing through or across other obstacles. DO NOT place or lean a loaded firearm on or against a tree, fence, automobile, or similar objects.

FAILURE TO FIRE: If your firearm fails to fire when you pull the trigger, keep the firearm pointed toward the target or a safe open area and wait for at least two minutes. If a hangfire (slow ignition) has occurred, the round will probably fire within two minutes. If the round does not fire, open the breech of the firearm and remove the round. If the primer of the round is indented, discard the round in a safe manner. If the primer of the round is not indented, or is lightly indented, or off-center, have the firearm examined by a competent gunsmith before the firearm is fired again.

USE caution to avoid dropping a loaded firearm. Dropping the firearm may cause an accidental discharge even if the safety is in the "Safe" position. Be extremely careful while hunting or during any other activity to avoid dropping any firearm. An accidental discharge could result in serious injury, or death.

TAKE EVERY PRECAUTION to prevent unsafe firearms handling practices around yourself and others. If you witness any unsafe gun handling practices by other shooters, politely suggest safe procedures for future use.

NEVER DISCHARGE a firearm near flammable material. Flame and sparks erupt from the firearm when discharged. They could start a fire or cause flammable liquids and gases to explode.

NEVER SHOOT at a hard surface such as a rock, or a liquid surface such as water. A projectile may ricochet and travel in any direction to strike you, or an object you cannot see, causing injury, death or damage to property.

NEVER WALK, CLIMB OR FOLLOW a companion with your firearm loaded. When walking, climbing or following a companion, MAKE SURE the chamber of the firearm is empty, and the safety is in the "Safe" position.

ALWAYS instruct children to respect firearms. If your children shoot, teach them or have them trained by a qualified instructor to treat and use firearms properly, and always supervise them closely.

NEVER abuse your firearm by using it for any purpose other than shooting.

NEVER fire your firearm near an animal unless it is trained to accept the noise. An animal's startled reaction could injure it or cause an accident.

READ, UNDERSTAND, AND PRACTICE all safety procedures and warnings in this manual. READ, UNDERSTAND AND PRACTICE all safety procedures and warnings on commercial ammunition cartons and containers. It is YOUR RESPONSIBILITY to collect, understand and practice the most up-to-date safe handling procedures for your firearm. NEITHER MERKEL nor GSI, INC. are responsible for injury, death or damage to property resulting from either intentional or accidental discharge of this firearm, or from its function when used for purposes

or subjected to treatment for which it was not designed.

KEEP this instruction manual on hand for future reference. Please include this manual with the firearm in the event you lend, give or sell this firearm to any other person.

BEFORE SHOOTING YOUR NEW FIREARM

Usually, your Merkel franchised dealer will furnish your firearm in completely assembled condition. You need only clean the barrel bore of oil and wipe the bore dry before shooting.
.

BORE OBSTRUCTIONS WARNING!

ANY OBSTRUCTION IN THE BORE OF THE FIREARM MAY RESULT IN DAMAGE TO THE FIREARM OR INJURY OR DEATH TO THE SHOOTER AND OR OTHER PERSONS NEARBY. BEFORE LOADING THE FIREARM, MAKE CERTAIN THE BORE IS CLEAR AND UNOBSTRUCTED.

If you suspect the firearm may have a bore obstruction resulting from excess oil, grease, packing material, or cosmoline, or from condensation or rain, snow or mud in the barrel, or from any other source whatsoever, inspect the bore to be sure it is clear and unobstructed.

WHENEVER YOU INSPECT THE BORE, MAKE CERTAIN THE FIREARM IS NOT LOADED, AND THAT THE CHAMBER IS EMPTY! THE BORE MAY BE CHECKED BY VISUALLY INSPECTING THE BARREL FROM THE RECEIVER END, NOT THE MUZZLE! REMEMBER, NEVER LOOK DOWN THE MUZZLE OF THE FIREARM!

Also, remember that a lodged projectile, wad or shot column is a common form of bore obstruction. They may become lodged in the bore if (assuming the trigger has been pulled with a live round in the chamber) the ammunition contains no powder, or the powder fails to ignite, and only the primer charge ignites, resulting in insufficient force to propel the projectile, wad or shot column out of the bore. Whenever an

obstruction occurs, keep the firearm pointing in a safe direction and proceed as follows:

- Any ammunition should be removed.

- Insert a proper size cleaning rod (without a tip or brush) into the bore from the muzzle and remove the obstruction. If the obstruction does not readily dislodge, it may be necessary to lightly tap the handle end of the cleaning rod. Do not attempt to remove an obstruction using blank ammunition, or ammunition from which the projectile (or shot) has been removed, or by any other means other than the use of a cleaning rod. Be certain all loose powder has been removed from the bore before inserting the rod. If you are unable to remove the obstruction, take the firearm to the nearest repair facility, or call GSI Inc., 108 Morrow Avenue, P.O. Box 129, Trussville, Alabama 35173, Tel. (205) 655-8299.

- After removing the obstruction, reinspect the bore to be certain it is free of powder particles or other debris. Clean the mechanism of unburned powder grains.

REMEMBER! ALWAYS CHECK THE BORE FOR AN OBSTRUCTION IF YOU EXPERIENCE DIFFICULTY IN CHAMBERING AMMUNITION, EXPERIENCE A FAILURE TO EXTRACT, HAVE A MISFIRE, OR THE FIREARM DOES NOT MAKE A NORMAL LOUD REPORT ON FIRING. A MISFIRE OR UNUSUAL REPORT IS ALWAYS A SIGNAL TO CEASE FIRING. FOLLOWING A MISFIRE OR AN UNUSUAL REPORT, KEEP THE FIREARM POINTED IN A SAFE DIRECTION AND WAIT TWO MINUTES BEFORE UNLOADING THE CHAMBER AND EXAMINING THE BORE OF THE FIREARM.

WARNING! IF LOADED AMMUNITION IS LODGED IN THE CHAMBER, DO NOT ATTEMPT TO REMOVE THE AMMUNITION BY USING A CLEANING ROD. TAKE THE FIREARM TO THE NEAREST REPAIR FACILITY, OR CALL GSI, Inc., 108 Morrow Avenue, P.O. Box 129, Trussville, Alabama 35173, Tel. (205) 655-8299.

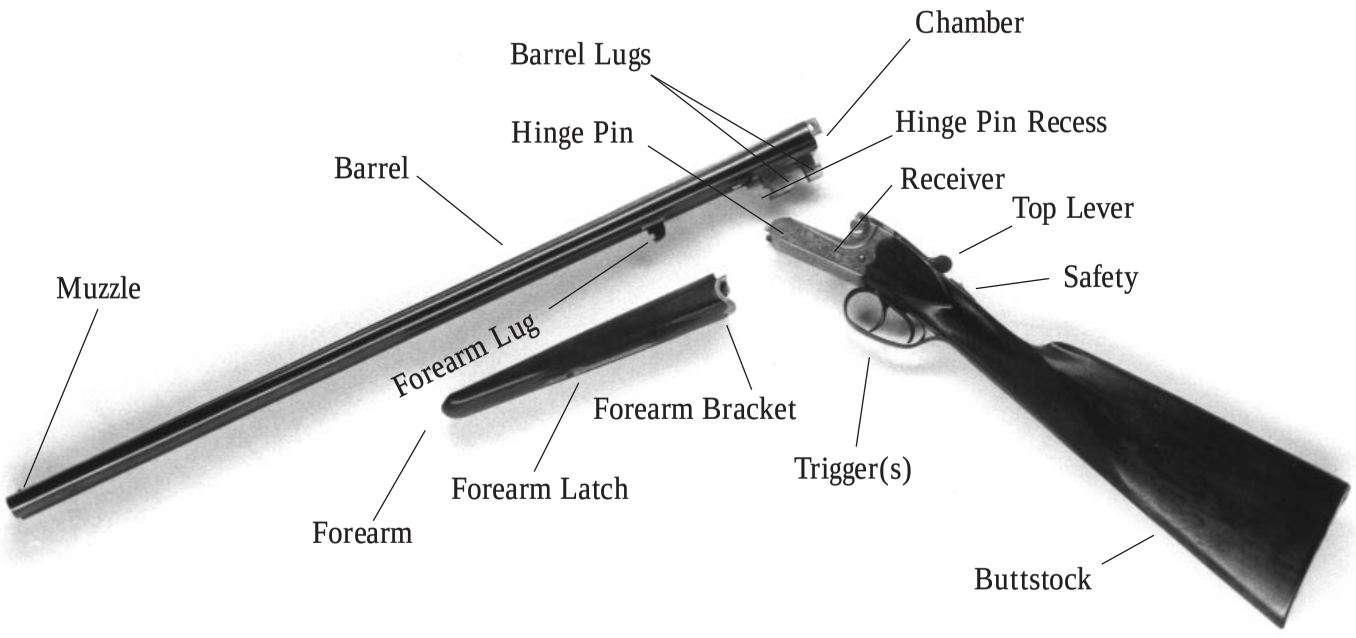


Figure 1-Parts Identification

MERKEL

Side-by-Side Shotguns, Double Rifles and Drillings

SPECIAL NOTE:

Unlike most firearms, your Merkel firearm is individually handcrafted by skilled gun makers who have inherited and acquired their skills from generations of the master gun makers in Suhl, Germany. Upon assembly you will notice that the working parts of your firearm will have distinctive tight fitting characteristics and may, therefore, be somewhat difficult to open, close, and lock the action.

These characteristics are typical of quality hand-fitted firearms that are built to the highest standards of precision machining. After initial firing of 100-200 rounds the action will begin to work more smoothly and will be easier to operate.

SERIAL NUMBER

The serial number of your Merkel Firearm is engraved on the receiver and the barrel. It is a good practice to record the serial number in a separate ledger for future reference.

SIDE-BY-SIDE SHOTGUNS

GENERAL SPECIFICATIONS

Merkel side-by-side shotguns are two barreled firearms with the barrels aligned along side each other with the sighting rib positioned between the barrels. Traditional models are typically equipped with two triggers each of which correspond to its respective barrel. A single selective trigger model is also available.

OPERATION OF SHOTGUN "SAFETY" MECHANISM

The firearm safety mechanism is located on the tang of the receiver assembly just in front of the buttstock on the top side (See figure 2). Merkel Side-by-Side Shotguns are equipped with Automatic Safeties, that is the safety is engaged each time the breech is opened. The firearm is in the "Safe" position when the safety is moved fully rearward and the letter "S" appears on the

receiver tang directly in front of the safety. In this position sear engagement is blocked to prevent discharge under non-firing conditions.

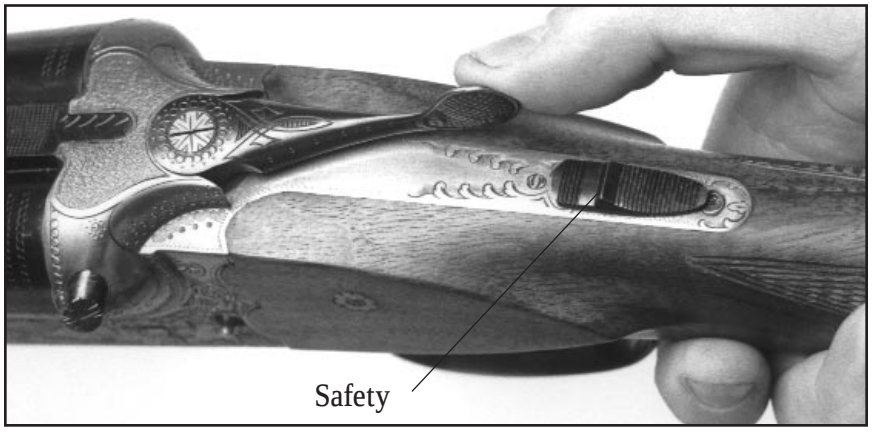


Figure 2 Side-by-Side Safety Mechanism

WARNING! SAFETIES ARE MECHANICAL DEVICES THAT MAY FAIL OR MALFUNCTION LIKE ANY OTHER MECHANICAL DEVICE! ALWAYS HANDLE THE SHOTGUN CAREFULLY AND DO NOT PERMIT THE SHOTGUN TO POINT IN AN UNSAFE DIRECTION! ALWAYS TREAT THE SHOTGUN AS IF IT WERE LOADED AND READY TO FIRE! ALWAYS OBSERVE SAFETY RULES WHEN HANDLING THE SHOTGUN! THE SAFETY SHOULD ALWAYS BE IN THE "SAFE" POSITION EXCEPT WHEN THE SHOOTER IS ACTUALLY FIRING THE GUN. THE SAFETY SHOULD BE MOVED TO THE "SAFE" POSITION WHENEVER THE SHOOTER CEASES FIRING, EVEN TEMPORARILY. KEEP THE MUZZLE OF THE FIREARM POINTED IN A SAFE DIRECTION AT ALL TIMES!

When the safety is indexed forward to its most forward position the firearm is in its firing mode. In this condition the trigger(s) can be pulled to fire the shotgun. The letter "S" inscribed on the tang of the receiver will be covered and obscured from view in this condition.

When you are not using your shotgun, be sure your gun is pointed in a safe direction, avoid contact with the trigger and make sure the safety is in its "Safe" position to prevent accidental discharge. Maintain the firearm safety in the "Safe" position at all times, unless you are actually firing the gun.

DOUBLE TRIGGER SHOTGUNS

On firearm models equipped with two triggers, each trigger operates its own barrel. The front trigger will fire the right barrel and the rear trigger will fire the left barrel. Do not pull both triggers at the same time in order to avoid excessive recoil or kick from simultaneous discharge of both barrels.

SINGLE SELECTIVE TRIGGER SHOTGUNS

Shotguns with single triggers are equipped with a cross-bolt barrel selector located on the upper portion of the trigger assembly (See figure 3). The barrel selector can be indexed to the right or left with the firing finger. The position of the barrel selector controls the firing order of the two barrels. When the selector is positioned to the right the left barrel fires first and the right barrel will be subsequently discharged when the trigger is pulled a second time. The right barrel is fired first when the selector is positioned on the left side of the trigger. Ensure that the safety is in the “Safe” or “S” position, and be careful to avoid contact with the trigger mechanism when the barrel selector is being moved.

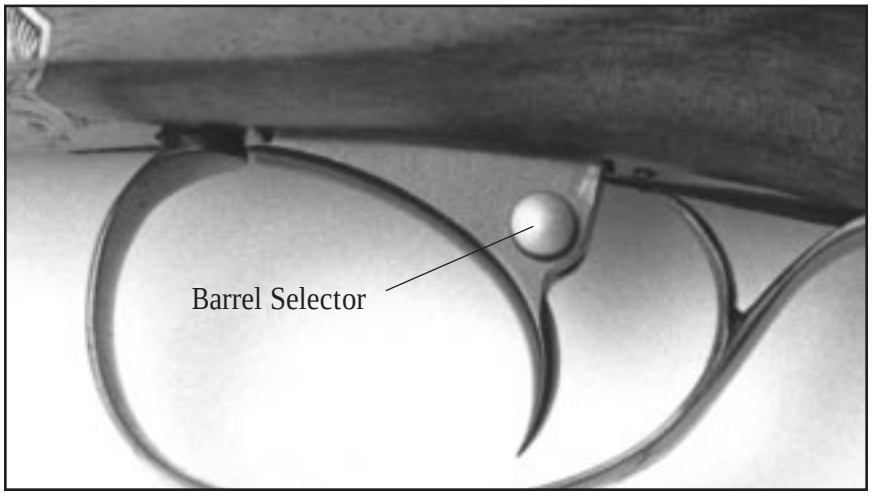


Figure 3- Barrel Selector on Single Trigger Shotguns

TOP LEVER

The top lever operates the locking bolt, which securely aligns and clasps the barrel assembly shut to the receiver for firing. The locking bolt and

barrel lugs are designed for gradual wear of locking surfaces and may therefore exhibit tight fitting characteristics during initial use. The close tolerances of these locking surfaces ensure that the breech of the firearm remains tight throughout use.

When closing the breech of the action let the top lever move freely to its locked (in line with the safety) position (see figure 4). Do not restrain its travel with your thumb.

It is recommended that the top lever be indexed to the left with slight finger or thumb pressure to make sure that the bolt is fully closed. If the bolt does not fully close it is possible dirt or debris have accumulated to a level preventing full closure of the breech. In this condition, open the action and unload the firearm. Carefully inspect the action and remove any dirt or debris. Keep the breech surface clean and lightly lubricated.

EJECTORS

Most Merkel Side-by-Side Shotguns are equipped with automatic ejectors. On these models, spent shells will be thrown out of the chamber automatically when the action is fully opened after firing. Be careful to position the breech away from your face when unloading the firearm to avoid being hit by ejected spent rounds.

LOADING AND FIRING

Before loading the firearm, visually inspect your safety and make sure it is in the “Safe” position. Never load the firearm with the safety in the firing position. Avoid contact with the trigger mechanism while loading ammunition and at all times prior to firing.

To insert rounds in the chamber, move the top lever to the right with the thumb of your firing hand and open the breech. Inspect the chambers and barrel bores to be sure they are free of any obstruction. Insert proper ammunition in each chamber and close the action. Be sure the round primer and rim is facing rearward when inserting shells in the chamber.

When you close the breech of the action, let the top lever move freely to its locked position. Do not restrain its travel with your thumb. It is recommended that the top lever be indexed to the left with slight pressure to make sure that the bolt is fully closed. (See figure 4).

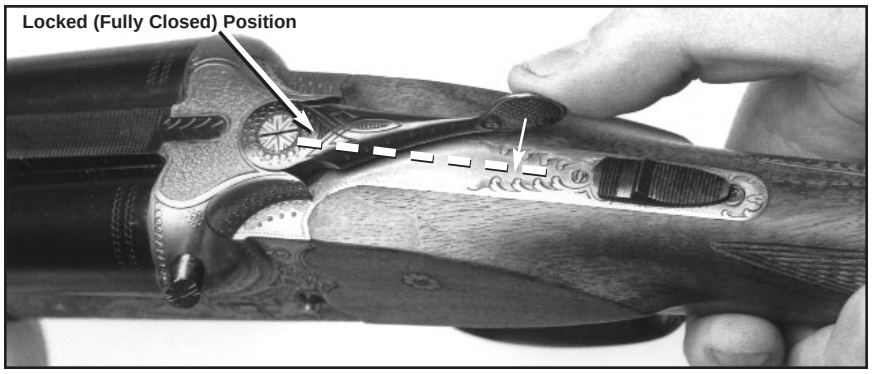


Figure 4-Closing the Breech

DOUBLE RIFLES

GENERAL SPECIFICATIONS

Merkel Double Rifles are two barreled firearms with the barrels aligned along side each other with the sighting rib positioned between the barrels, and are typically equipped with two triggers each of which correspond to its respective barrel.

OPERATION OF THE DOUBLE RIFLE "SAFETY" MECHANISM

The double rifle safety mechanism is located on the tang of the receiver assembly just in front of the buttstock on the top side (See figure 5). Some Merkel Double Rifles are equipped with Automatic Safeties, i.e., the safety is automatically engaged each time the breech is opened. Double rifles in .375H&H, .416 Rigby or .470 Nitro Express are not equipped with automatic safeties because they are designed for dangerous game when the need for quick reloading and follow-up shots are critical. The firearm is in the "safe" position when the safety is moved fully rearward and the letter "S" appears on the receiver tang directly in front of the safety. In this position sear engagement is blocked to prevent discharge under non-firing conditions.

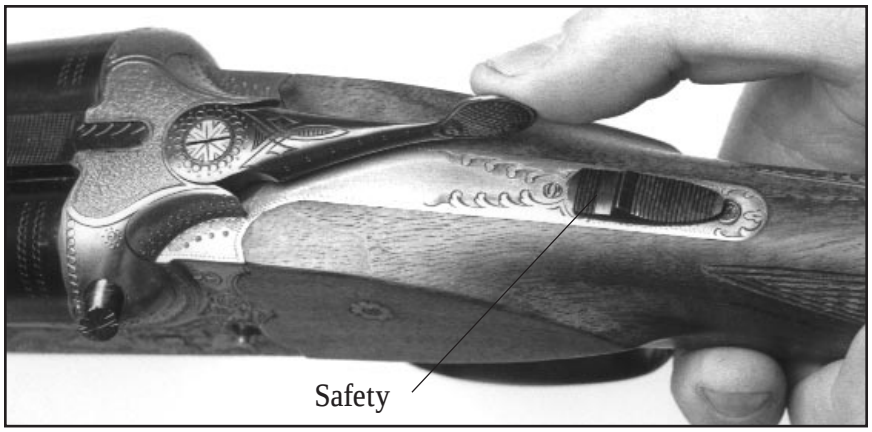


Figure 5 - Double Rifle Safety Mechanism

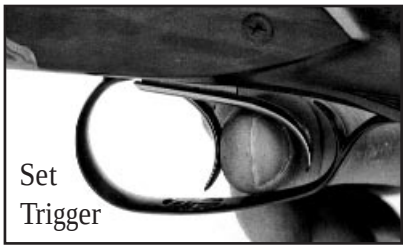
WARNING! SAFETIES ARE MECHANICAL DEVICES THAT MAY FAIL OR MALFUNCTION LIKE ANY OTHER MECHANICAL DEVICE! ALWAYS HANDLE THE RIFLE CAREFULLY AND DO NOT PERMIT THE RIFLE TO POINT IN AN UNSAFE DIRECTION! ALWAYS TREAT THE RIFLE AS IF IT WERE LOADED AND READY TO FIRE! ALWAYS OBSERVE SAFETY RULES WHEN HANDLING THE RIFLE!
THE SAFETY SHOULD ALWAYS BE IN THE "SAFE" POSITION EXCEPT WHEN THE SHOOTER IS ACTUALLY FIRING THE GUN. THE SAFETY SHOULD BE MOVED TO THE "SAFE" POSITION , WHENEVER THE SHOOTER CEASES FIRING, EVEN TEMPORARILY. KEEP THE MUZZLE OF THE FIREARM POINTED IN A SAFE DIRECTION AT ALL TIMES!

When the safety is indexed forward to its most forward position the rifle is in its firing mode. In this condition the triggers can be pulled to fire the rifle. The letter "S" inscribed on the tang of the receiver will be covered and obscured from view in this condition.

When you are not using your firearm, be sure your gun is pointed in a safe direction, avoid contact with the trigger and make sure the safety is in its "Safe" position to prevent accidental discharge. Maintain the firearm safety in the "Safe" position at all times, unless you are actually firing the rifle.

DOUBLE TRIGGER OPERATIONS

Each trigger on the double rifle operates its own barrel. The front trigger will fire the right barrel and the rear trigger will fire the left barrel. Do not pull both triggers at the same time in order to avoid excessive recoil or kick from simultaneous discharge of both barrels. The front trigger on some models is a set trigger and can be set by pushing the trigger forward. NEVER fire the rear trigger with the front trigger in the set position as both barrels may fire simultaneously. Set triggers are not available on double rifles in .375H&H, .416 Rigby or .470 Nitro Express.


Set Trigger

TOP LEVER

The top lever operates the locking bolt, which securely aligns and clasps the barrel assembly shut to the receiver for firing. The locking bolt and barrel lugs are designed for gradual wear of locking surfaces and may therefore exhibit tight fitting characteristics during initial use. The close tolerances of these locking surfaces ensure that the breech of the firearm remains tight throughout use.

When closing the breech of the action let the top lever move freely to its locked (in line with the safety) position (see figure 6). Do not restrain its travel with your thumb.

It is recommended that the top lever be indexed to the left with slight finger or thumb pressure to make sure that the bolt is fully closed. If the bolt does not fully close it is possible that dirt or debris has accumulated to a level preventing full closure of the breech. In this condition, open the action and unload the firearm. Carefully inspect the action and remove any dirt or foreign matter. Keep the polished breech surface clean and lightly lubricated.

EJECTORS

As an option Merkel double rifles are available with automatic ejectors. On these models, spent shells will be thrown out of the chamber auto-

matically, when the action is fully opened after firing. Be careful to position the breech away from your face when unloading the firearm to avoid being hit by ejected spent rounds. Ejectors are not available on double rifles in .375H&H, .416 Rigby or .470 Nitro Express.

EXTRACTORS

Merkel Double Rifles not fitted with optional ejectors are fitted with extractors. When the action is opened on these models the fired cases are elevated above the chamber for removal by hand. All .375H&H, .416 Rigby or .470 Nitro Express, double rifles are equipped with extractors.

LOADING AND FIRING

Before loading the rifle, visually inspect your safety and make sure it is in the "Safe" position. Never load the rifle with the safety in the firing position. Avoid contact with the trigger mechanism while loading ammunition and at all times prior to firing.

To insert cartridges in the chamber, move the top lever to the right with the thumb of your firing hand and open the breech. Inspect the chambers and barrel bores to be sure they are free of any obstruction. Insert a cartridge in each chamber and close the action. Be sure the round primer and rim is facing rearward when inserting cartridges in the chamber. When you close the breech of the action, let the top lever move freely to its locked position. Do not restrain its travel with your thumb. It is recommended that the top lever be indexed to the left with slight pressure to make sure that the bolt is fully closed. (See figure 6).

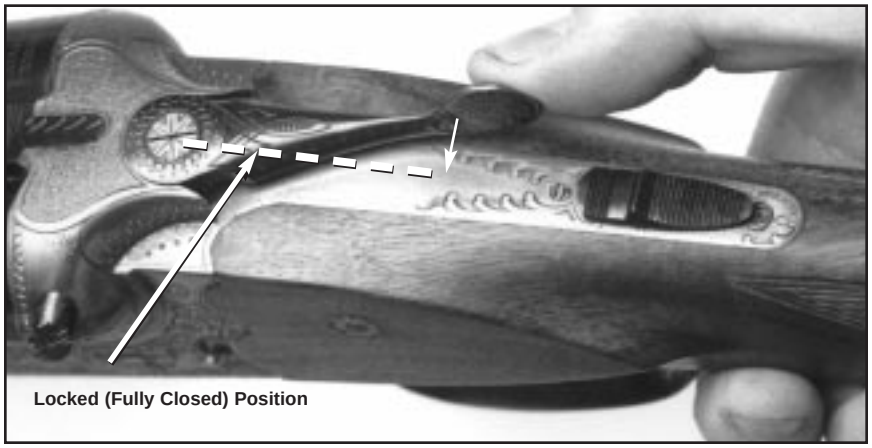


Figure 6-Closing the Breech

DRILLINGS

GENERAL SPECIFICATIONS

Merkel Drillings differ from side-by-side shotguns in that in addition to two side-by-side shotgun barrels there is a rifle barrel centered directly under the two shotgun barrels.

OPERATION OF THE DRILLING "SAFETY" MECHANISM

There are three positions: 1. Safe 2. Fire for Shotgun barrels 3. Fire for Rifle barrel and left Shotgun barrel.

ATTENTION-MANUAL SAFETY MECHANISM!

THE SAFETY PROVIDED ON MERKEL DRILLINGS IS MANUALLY OPERATED AND DOES NOT OPERATE AUTOMATICALLY. THE SHOOTER MUST MANUALLY MOVE THE SAFETY TO BOTH ITS SAFE AND FIRE POSITIONS. FAILURE TO MANUALLY MOVE THE SAFETY TO ITS DESIRED POSITION COULD CAUSE AN ACCIDENTAL DISCHARGE!

Position 1 - Safety slide is to the rear (red dot firing indicator is covered by the safety selector). The trigger sears are blocked for the shotgun and rifle barrels.

Position 2 - The safety slide is indexed forward by depressing the the safety button on the safety slide and pushing the safety slide forward

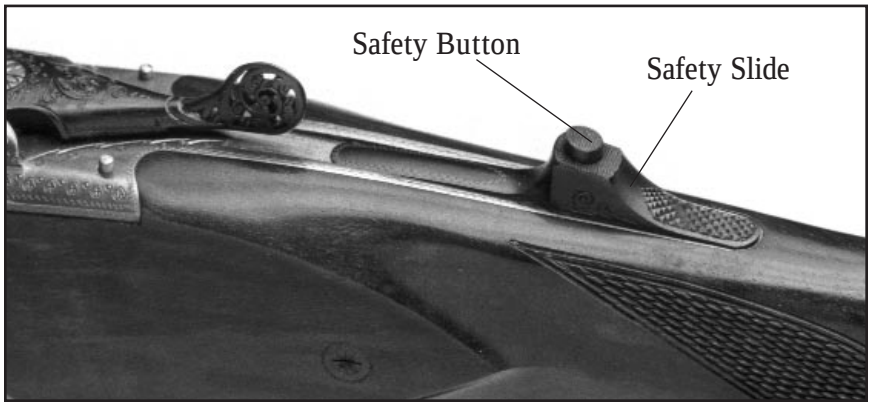


Figure 7 - Drilling Safety Mechanism

until the red dot firing indicator is uncovered. Both shotgun barrels can now be fired. The front trigger fires the right barrel and the rear trigger the left barrel.

Position 3 - The rifle barrel is selected by pushing the safety slide all the way forward, the rifle is cocked when the safety button on the safety slide pops up. The rifle barrel can now be fired by using the front trigger and the rear trigger will fire the left shotgun barrel.

Uncocking the Drilling's Rifle Barrel - Depress the button on the safety slide and allow the the safety to slide rearward.

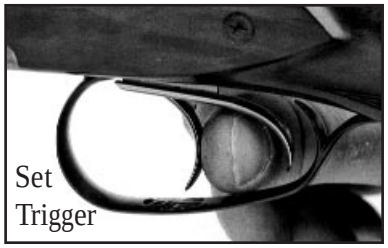
Moving to Safe position - Press the button on the safety slide and move the slide completely to the rear. The firearm is now in its "Safe" position.

WARNING! SAFETIES ARE MECHANICAL DEVICES THAT MAY FAIL OR MALFUNCTION LIKE ANY OTHER MECHANICAL DEVICE! ALWAYS HANDLE THE DRILLING CAREFULLY AND DO NOT PERMIT THE DRILLING TO POINT IN AN UNSAFE DIRECTION! ALWAYS TREAT THE DRILLING AS IF IT WERE LOADED AND READY TO FIRE! ALWAYS OBSERVE SAFETY RULES WHEN HANDLING THE DRILLING! THE SAFETY SHOULD ALWAYS BE IN THE "SAFE" POSITION EXCEPT WHEN THE SHOOTER IS ACTUALLY FIRING THE GUN. THE SAFETY SHOULD BE MOVED TO THE "SAFE" POSITION , WHENEVER THE SHOOTER CEASES FIRING, EVEN TEMPORARILY. KEEP THE MUZZLE OF THE FIREARM POINTED IN A SAFE DIRECTION AT ALL TIMES!

When you are not using your firearm, be sure your gun is pointed in a safe direction, avoid contact with the trigger and make sure the safety is in its "Safe" position to prevent accidental discharge. Maintain the firearm safety in the "Safe" position at all times, unless you are actually firing the gun.

DOUBLE TRIGGER OPERATIONS

All Drillings are equipped with two triggers, each trigger operates its own barrel. The front trigger will fire 1) the right barrel or 2) the rifle barrel when the safety is indexed all the way forward (see Position 3 above). The rear trigger will fire the left shotgun barrel . Do not pull both triggers at the same time in order to avoid excessive recoil or kick



Set Trigger

from simultaneous discharge of both barrels. The front trigger also can function as a set (hair) trigger and can be set by pushing the trigger forward. NEVER fire the rear trigger with the front trigger in the set (hair) position as both barrels could fire simultaneously. Note: The front trigger can be operated in its set (hair) mode for either the rifle barrel or the right shotgun barrel.

TOP LEVER

The top lever operates the locking bolt, which securely aligns and clasps the barrel assembly shut to the receiver for firing. The locking bolt and barrel lugs are designed for gradual wear of locking surfaces and may therefore exhibit tight fitting characteristics during initial use. The close tolerances of these locking surfaces ensure that the breech of the firearm remains tight throughout use.

When closing the breech of the action let the top lever move freely to its locked (in line with the safety) position (see figure 8). Do not restrain its travel with your thumb.

It is recommended that the top lever be indexed to the left with slight finger or thumb pressure to make sure that the bolt is fully closed. If the bolt does not fully close it is possible that dirt or debris has accumulated to a level preventing full closure of the breech. In this condition open the action and unload the firearm. Carefully inspect the action and remove any dirt or foreign matter. Keep the polished breech surface clean and lightly lubricated.

EXTRACTORS

Merkel Drillings are equipped with extractors. When the action is opened, the round casings are elevated above the chamber for removal by hand.

LOADING AND FIRING

Before loading the firearm, visually inspect your safety and make sure it is in the “Safe” position. Never load the firearm with the safety in the firing positions. Avoid contact with the trigger mechanism while loading ammunition and at all times prior to firing.

To insert rounds in the chamber, move the top lever to the right with the thumb of your firing hand and open the breech. Inspect the chambers and barrel bores to be sure they are free of any obstruction. Insert a round in each chamber and close the action. Be sure the round primer and rim is facing rearward when inserting shells in the chamber. When you close the breech of the action, let the top lever move freely to its locked position. Do not restrain its travel with your thumb. It is

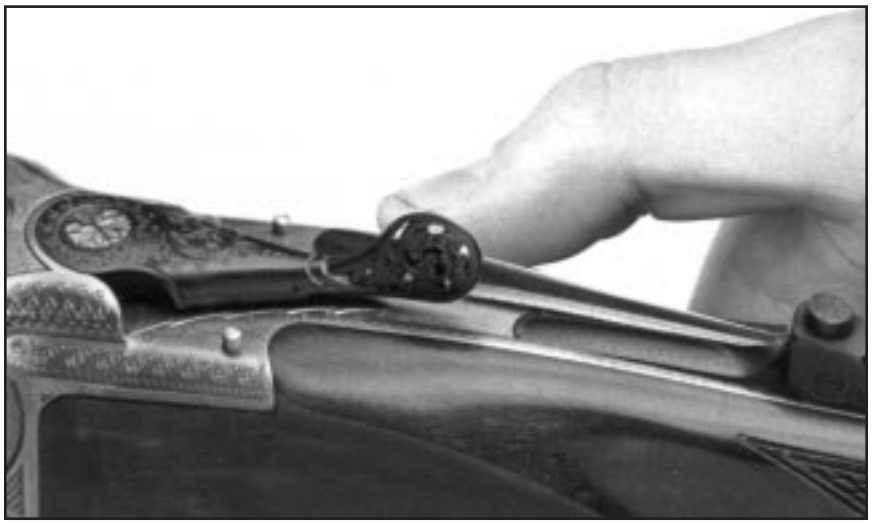


Figure 8-Closing the Breech

recommended that the top lever be indexed to the left with slight pressure to make sure that the bolt is fully closed. (See figure 8).

The firearm is now ready to fire. Shots are discharged by indexing the safety forward and pulling the trigger.

FIREARM ASSEMBLY

SIDE-BY-SIDE SHOTGUNS, DOUBLE RIFLES & DRILLINGS

Before assembly, be certain there is no ammunition in either chamber and position the safety in the “S” or “Safe” position.

Remove all protective lubricants from your firearm before initial assembly. Use a cleaning rod, patches and a light gun oil or solvent to clean the interior of the firearm bore. Use a cleaning cloth and light gun oil to remove protective lubricants from metal parts on the receiver and barrel assemblies.

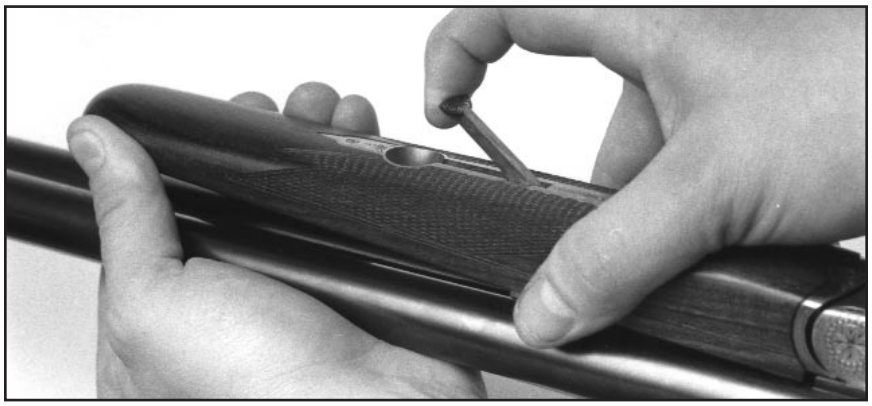


Figure 9-Removal of Forearm

Remove the forearm from the barrels by pulling the forearm latch out and away from the underside of the forearm (See figure 9). Remove all protective lubricants from the exposed metal surfaces with light gun oil and a cleaning cloth. After cleaning, place a couple of drops of gun oil on the metal bearing surfaces of the hinge, barrel lugs and on the forearm bracket (see figure 1).

The barrels are attached to the action by grasping the stock grip with the firing hand and supporting the buttstock in between the firing elbow and body (See figure 10). Grasp the barrels with the non-firing hand and connect the barrel lug hinge with the receiver hinge pin. Use the thumb of the firing hand to move the top lever sideways to its most right position.

Maintain pressure on the barrels to keep the hinge pin aligned with the bar-

rel lug hinge pin recess, and rotate the barrels upward to close the action. Release the top lever at this time.

Pivot the forearm assembly onto the barrels. Align the forearm in its proper position on the barrels and push the forearm lever upward into its housing. This locks the forearm back into its original position on the barrels.

Figure 10-Barrel Assembly

ATTENTION! While assembling your firearm, do not use excessive force when closing the action! If the action and barrels are not aligned properly, excessive force applied during assembly can deform or mar the fitted surfaces of the firearm. If you perceive any interference while installing the barrels to the receiver repeat the assembly procedures from beginning, and be extra careful to align the barrel lug hinge pin recess and the receiver hinge pin properly. If you continue to experience difficulty in the assembly of your firearm, call GSI or seek assistance from a qualified gunsmith.

GAUGE, CALIBER, CHAMBER LENGTH AND CHOKE DESIGNATION

It is most important that the correct ammunition is used with your firearm. Use of incorrect ammunition with your firearm could cause injury or death to the shooter and damage to the firearm. Never use

ammunition that does not match the corresponding gauge or caliber of the firearm. For example, do not use 20 gauge ammunition in a 12 gauge gun. In addition, do not use rounds with chamber lengths that exceed the chamber length of the firearm barrel.

DANGER - AMMUNITION WARNING!

SERIOUS INJURY OR DEATH OR PROPERTY DAMAGE MAY RESULT FROM ANY CONDITION WHICH CONTRIBUTES TO THE GENERATION OF EXCESSIVE PRESSURE, OR THE UNCONTROLLED RELEASE OF GAS, WITHIN A FIREARM. THE FOREGOING ADVERSE CONDITIONS CAN BE CAUSED BY BORE OR CHAMBER OBSTRUCTIONS, PROPELLANT POWDER OVERLOADS, OR BY DEFECTIVE, INCORRECT CALIBER, GAUGE OR LENGTH, OR IMPROPERLY LOADED AND ASSEMBLED AMMUNITION COMPONENTS. IT IS EXTREMELY DANGEROUS TO USE AMMUNITION WHOSE PRESSURE IS GREATER THAN THAT DEVELOPED BY AMMUNITION LOADED TO FACTORY STANDARDS. EVEN THE STRONGEST FIREARM CAN BE BLOWN UP AS A RESULT OF EXCESSIVE PRESSURE.

The following information describes the identification system used to designate the gauge, chamber length and choke on your Merkel firearm. Be sure you understand this identification system before loading your firearm, and only use the correct ammunition. If there is any question in regard to the proper ammunition for your firearm, feel free to call GSI at 205-655-8299 for assistance.

Firearm gauge, chamber and choke designations are engraved on the underside of the barrels where they interface the breech block of the receiver (See figure 11). A typical example of a gauge/chamber length designation would be 12/76 which identifies a firearm bore diameter of 12 gauge and 76 mm (3 inch) chamber length. Bore diameters are available in 12, 16, 20 and 28 gauge.

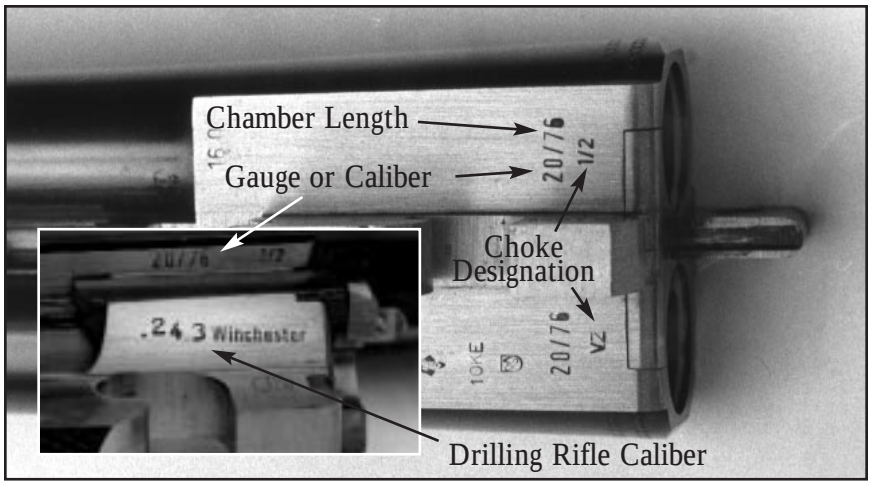


Figure 11-Gauge, Chamber Length and Choke Designation

Chamber lengths are identified by the numeral 70 or 76. The numeral 76 designates a chamber length of 76mm which is equal to the English measurement of 3 inches. A barrel marked with the numeral 70 designates a chamber length of 70mm which is equal to the English measurement of $2^{3}/_{4}$ inches.

Use of shotgun rounds with chamber lengths shorter than the shotgun chamber length is acceptable. However, never use rounds with chamber lengths greater than the length of the shotgun chamber. For example, do not use 3 inch shells in a shotgun chambered for $2^{3}/_{4}$ inch ammunition. In the rifle barrel of your drilling always insure that you are using the proper caliber ammunition. For example, do not use .270 Winchester ammunition in a rifle barrel chambered for 30/06 Springfield.

Chokes are identified for each barrel below the designation for gauge and chamber length on the underside of the barrels. Choke designation indicates the dispersion pattern characteristics of the shotgun bore. The chart on the following page provides identification for choke and a pattern percentage within a 30 inch circle at specified ranges.

Choke Identification	Description	Percentage	Distance
1/1	Full Choke	70 - 75	35m
3/4	Improved Modified Choke	65 - 70	35m
1/2	Modified Choke	60 -65	35m
1/4	Quarter Choke	55 - 60	35m
VZ	Improved Cylinder Choke	45 - 50	35m
S	Skeet	70 - 75	20m

DRY FIRING

ATTENTION!!!!! Dry firing or pulling the triggers without live ammunition is not recommended without the use of snap caps. Snap caps absorb the inertia of the firing pins and protect internal parts from the full impact force of the hammers. Continuous dry firing can potentially damage the internal parts and render the gun inoperable.

DISASSEMBLY

Remove loaded ammunition from the chamber before disassembling the firearm. To disassemble the firearm, grasp the firearm barrel with the non-firing hand and rest the buttstock against the upper leg. Pull the forearm take down latch out and away from the forearm and pivot the forearm away from the barrels.

Push the top lever to the right and carefully open the action to rotate

the barrel lug away from the receiver hinge pin and separate the barrels from the receiver. The forearm can be reattached to the barrels for storage.

Do not attempt further disassembly beyond barrel and forearm removal!!! Further disassembly is not necessary for routine maintenance. Any damage incurred due to further disassembly is not covered by your service warranty.

FURTHER DISASSEMBLY BY UNQUALIFIED PERSONS COULD CAUSE DAMAGE TO THE FIREARM WHICH COULD RESULT IN INJURY OR DEATH TO THE SHOOTER.

CLEANING

Merkel firearms require periodic maintenance and will perform more reliably over a longer period of time if properly cleaned and serviced. NEVER clean a loaded firearm. Remove ammunition from the chambers before performing any cleaning procedures.

Always wipe the barrels and action with a lightly lubricated cloth to remove fingerprints, dirt and moisture from the gun after handling. Keep a light coat of gun oil on polished metal surfaces and moving parts. Clean inside the barrels periodically to remove fouling and residue caused by fired ammunition.

If the action seems unusually tight or if you are unable to close the breech to its locked position, disassemble the firearm and give it a thorough cleaning. If functional problems continue, call the GSI Service Department or seek the assistance of a competent and qualified gunsmith. A light cleaning consists of oiling and wiping down the firearm. This can be accomplished without removing the barrels from the receiver. A full detailed cleaning will require disassembly of the barrels and forearm.

General cleaning procedures are outlined as follows.

Make sure the chambers are unloaded on your firearm. Wear protective safety glasses during assembly, disassembly and cleaning procedures. Keep ammunition away from the cleaning area. NEVER test the function of your firearm with live ammunition.

Remove the barrels and forearm from the receiver according to disassembly instructions provided in this manual.

Use a cleaning rod with a tip and patch suitable for use in firearm bores. Lightly oil the patch and place it on the tip of the cleaning rod. Insert the tip of the cleaning rod with the attached patch into the chamber end of the barrels and push the patch back and forth through both barrels several times. Inspect the bores from both ends of the barrels for residue caused by leading and plastic shot cups. This residue will form streaks that run parallel to the inside of the bore. Slight residue streaks are common place and will not affect the performance of your firearm.

If lead or plastic residue appears to be excessive it can be removed by brushing the bores with a brass brush attached to the cleaning rod.

First apply gunpowder solvent to the brush end of the cleaning brush. Insert the cleaning rod into the chamber end of the bores. Push the brush completely through the firearm bore before pulling it backwards to avoid breaking the bristles on the brush. Continue this scrubbing action until the bores are clean.

When all fouling and residue is removed, push a clean dry patch through both bores with the cleaning rod to remove any remaining debris or solvent. When the bores are free of all solvent and debris, insert a lightly oiled patch and lubricate the bores.

Wipe the metal surfaces of the barrels, forearms and receiver with a clean rag. Lightly oil the metal parts on the receiver hinge, and barrel lugs and the forearm brackets.

Notes

Notes

Notes

Quick Reference For Your Merkel

Model Number:_____

Gauge:_____

Barrel Length:_____

Choke:_____

Serial Number:_____

Date Purchased:_____

U.S. IMPORTER

GSI Incorporated, 108 Morrow Ave.,
P.O. Box 129, Trussville, Al 35173.
Telephone (205) 655-8299
Fax (205) 655-7078
www.GSIfirearms.com